

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-16 (Cancelled).

17. (Original) An improved method for injecting a pharmaceutical agent into the tissue of a living host using a needle positioned from a lumen of a blood vessel, wherein the improvement comprises positioning the needle outwardly from the blood vessel lumen and confirming that a delivery aperture of the needle has penetrated into tissue beyond an external elastic lamina (EEL) of the blood vessel before injecting the pharmaceutical agent.

18. (Original) An improved method as in claim 17, wherein confirming comprises injecting contrast media through the needle aperture and observing distribution of the media.

19. (Original) An improved method as in claim 17, wherein confirming comprises monitoring injection pressure.

20. (Original) An improved method as in claim 17, wherein confirming comprises monitoring temperature near the delivery aperture.

21. (Original) An improved method as in claim 17, wherein confirming comprises monitoring pH near the delivery aperture.

22. (Original) An improved method as in claim 17, wherein confirming comprises monitoring electrical impedance near the delivery aperture.

23. (Original) An improved method as in claim 17, wherein confirming comprises monitoring insertion force while positioning the needle through the EEL.

Claims 24-29 (Cancelled).

30. (New) A method as in claim 17, wherein the needle is positioned so that a penetration distance of the delivery aperture of the needle beyond the EEL does not exceed 5mm.

31. (New) A method as set in claim 30, wherein the agent distributes longitudinally along the blood vessel over a distance of at least 1 cm and radially by a distance of at least 1 cm or within a time period no greater than 60 minutes.

32. (New) A method as in claim 31, wherein the concentrations of agent at all locations spaced at least 2 cm from the delivery site are at least 10% of the concentration at the delivery site.

33. (New) A method as in claim 30, wherein the agent distributes via the lymphatic system surrounding the target.

34. (New) A method as in claim 30, wherein the aperture of the needle is positioned at a distance less than 5 mm beyond the EEL.

35. (New) A method as in claim 34, wherein pharmaceutical agent comprises a small molecule drug, a protein, or a gene.

36. (New) A method as in claim 35, wherein the agent has a maximum dimension of 200 nm or below.

37. (New) A method as in claim 30, wherein the blood vessel is a coronary blood vessel.

38. (New) A method as in claim 35, wherein the coronary blood vessel is an artery.

39. (New) A method as in claim 38, wherein the coronary artery is at risk of hyperplasia.

40. (New) A method as in claim 38, wherein the coronary artery has regions of vulnerable plaque.
41. (New) A method as in claim 30, wherein the patient is suffering from congestive heart failure or a cardiac arrhythmia.
42. (New) A method as in claim 30, wherein the blood vessel is a cerebral blood vessel and the tissue is in the brain of the host.
43. (New) A method as in claim 30, wherein the blood vessel is a hepatic blood vessel and the tissue is in the liver of the host.
44. (New) A method as in claim 30, wherein the agent is being delivered to treat a neoplastic disease in the tissue.